Central Illinois Lincoln Logs

National Weather Service, Lincoln IL

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Meteorologists Participate in Prescribed Burn

By: Patrick Bak, Senior Forecaster and Fire Weather Focal Point

On March 30, three meteorologists from the National Weather Service (NWS) in Lincoln participated in a prescribed burn conducted by the Charleston office of the Illinois Department of Natural Resources (DNR). Patrick Bak, Chuck Schaffer, and Kirk Huettl accompanied a fire crew to the burn site in northern Cumberland county. The 140 acre burn area consisted primarily of native and cool season grasses.

Meteorologists Kirk Huettl and Chuck Schaffer don protective gear before observing the burn.

Prescribed burning is a tool used by land management agencies to establish and/or maintain the desired diversity of plants in a specific area. It is becoming increasingly common in Illinois as prairie restoration projects become more widespread. Prairie plants are accustomed to burning and can thrive in the wake of a burn, while many invasive plants will fare poorly. Prescribed burning can also be used remove plant litter such as fallen leaves, needles, and branches.

This specific burn site was formerly used as agricultural land. However, due to poor soil conditions and erosion problems at the site, a decision was made to transition the land to native grasses. An additional goal of growing native grasses at the site is to provide habitat for ground dwelling birds and other wildlife.

During the spring (or fall) Fire Weather season, the NWS in Lincoln issues routine Fire Weather Forecasts twice daily, around 6 AM and 3 PM, to assist land managers with planning and decision making with respect to prescribed burning. In addition, Fire Weather Watches and Red Flag Warnings will be issued as needed when the combination of dry fuels (grasses, trees, etc) and weather conditions support extreme fire danger. For site specific Fire Weather forecast needs, Spot Forecasts will be issued upon request from land management agencies to support prescribed burn or wildfire operations.

Check out the Fire Weather section on our website for more information:

http://www.crh.noaa.gov/ilx/?n=firewx

Jacksonville NOAA Weather Radio coverage change:

Effective May 18, Calhoun County will be added to the coverage area for NOAA Weather Radio station WXM-90 in Jacksonville. Users with programmable radios can enter county code **017013** to receive the alerts.

Calhoun County will remain in the coverage area for station KXI-70 in Jerseyville. This way, listeners can tune to whichever station comes in best in their area.

Lincoln NWS Hosts Severe Weather Workshop

On March 6, the Lincoln NWS hosted a severe weather workshop, for emergency managers and the media across central and southeast Illinois.

Staff members gave presentations on the tornadoes which affected Loami and Williamsville last August, new surveying techniques used for storm damage investigations, wind farms, and fatalities from wind storms. During the afternoon, "roundtable discussions" were held on the subjects of decision support services, communicating hazards, and societal impacts in the warning process.

Llyle Barker (left) leads a roundtable discussion during the severe weather workshop,

NWS staff making presentations included Llyle Barker (Science and Operations Officer), Chris Miller (Warning Coordination Meteorologist), Darrin Hansing (Service Hydrologist), and Ed Shimon (senior forecaster).

New "Tag Line" in Severe Thunderstorm Warnings

When a Severe Thunderstorm Warning (SVR) or follow-up Severe Weather Statement (SVS) is issued this year, a new, experimental "tag line" of information will give you a quick look at what the main wind and hail threats are for the warned storm. This line of information will be at the very bottom of the SVR and SVS in the format **WIND…HAIL (expected wind gusts) MPH (expected hail size)IN**

For example, if a Severe Thunderstorm Warning was issued for 80 mph wind gusts and 1.00" diameter hail, the tag line would be:

WIND…HAIL 80 MPH 1.00IN
$$

This tag line is intended to give users of Severe Thunderstorm Warnings and follow-up Severe Weather Statements a quick way to make decisions regarding the impacts of the anticipated storm. This experimental tag line will be evaluated toward the end of 2010, to determine its usefulness in the SVR and SVS. We encourage comments, or suggestions for improvement, regarding this tag line through the following web site:
http://www.weather.gov/survey/nws-survey.php?code=svr-wind-hail

Winter Climate Statistics:

Peoria:

- 10th wettest and 2nd snowiest on record
- Average temperature 23.9°F (2.9°F below normal)
- 7.91" of precipitation (2.34" above normal)
- 41.5" of snow (20.6" above normal)

Springfield:

- Average temperature 26°F (2.7°F below normal)
- 7.90" of precipitation (1.94" above normal)
- 23.7" of snow (4.8" above normal)

Lincoln:

- 8th coldest winter on record
- Average temperature 23.4°F (3.8°F below normal)
- 6.95" of precipitation (1.07" above normal)
- 23.5" of snow (7.4" above normal)

Using Twitter to Report Severe Weather

By: Chris Miller, Warning Coordination Meteorologist

Recently, the National Weather Service began a program for people to report severe and hazardous weather reports through the social networking site "***Twitter***". We ask that you send your severe and hazardous weather "tweets" to us using a specific format so we can map your location, and your report, as accurately as possible. To do this in Twitter, or through the use of Twitter applications on mobile devices, use the "hash tag" **#wxreport**

This will be followed by the "**WW**" characters and your location, and then "**WW**" characters with your report. The location can be your zip code, city and state, and address (with city and state), an intersection of two roads (with the nearest city, state) or latitude/longitude points. An example of a report from Lincoln, IL would be:

#wxreport WW Lincoln, IL WW 70 mph wind and golf ball sized hail

If you have a mobile device which is capable of "geo coding" or "geo tagging" then all you need to do is send your report after the hash tag. An example of this would be:

#wxreport 70 mph wind and golf ball sized hail

Trained spotters with Spotter ID numbers should include their ID number in the report. All other reports will be used by the NWS as "public reports" for supplemental information – which will be verified by emergency managers or trained spotters. Keep in mind, that with Twitter messages, you are limited to 140 characters, so keep the reports brief.

For more information regarding Twitter reports and the NWS, go to the NWS Twitter Information page at: http://www.weather.gov/stormreports

Climate Statistics for 2009

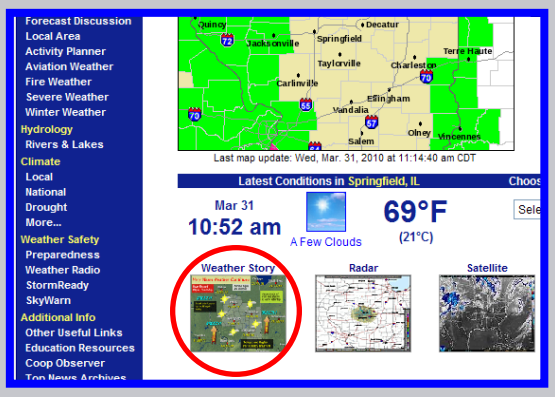
	Avg. Temperature (vs Normal)	Total Precipitation (vs. Normal)	Total Snowfall (vs. Normal)
Decatur	53.8°F (+0.8°F)	53.28" (+13.54")	17.6" (-4.0")
Effingham	52.9°F (+0.1°F)	52.34" (+10.29")	15.2" (-5.4")
Lincoln	50.6°F (-0.6°F)	50.14" (+11.84")	19.0" (-1.3")
Peoria	50.7°F (-0.1°F)	54.51" (+18.49")	37.7" (+11.4")
Springfield	52.9°F (+0.2°F)	52.62" (+17.06")	20.1" (-4.5")
Urbana	51.1°F (-0.3°F)	51.24" (+10.19")	19.4" (-6.7")

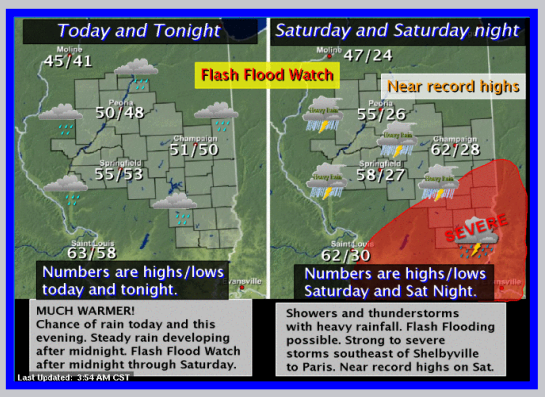
Navigating the Lincoln NWS Page for Severe Weather Info

By: Chris Miller, Warning Coordination Meteorologist

One of the questions I am asked most often when I do outreach is "There is so much information on your web page. Where should I start if I want details about severe weather?" In this article, I will give you some guidelines about where to look as a severe weather event evolves.

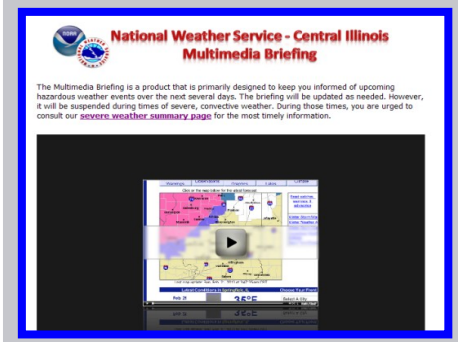
The best place to start each day is to look at our "Weather Story", which can be found below the main map and latest conditions (red circle in the lower left image below).





The "Weather Story" is a depiction of the main weather concerns for the next few days (see image at top right). This product will help you highlight what areas of central or eastern Illinois are anticipating hazardous weather.

The next place to check is our "**Top News of the Day**" section at the top of our web page. If any hazardous weather is anticipated, this section will have a highlighted story explaining the expected storm and its impacts, or a link to an image or other part of our web page with information about the upcoming event.



New for this severe weather season will be use of the "**Multimedia Briefing**" which you can access from a link that would be placed in our "Top News of the Day" section. This "**Multimedia Briefing**" will be done when there is a Moderate or High Risk of Severe Weather. These will also be created for significant and widespread flooding and winter storms. When the "**Multimedia Briefing**" page opens up, just click on the "play" icon in the middle of the screen and you will get a 2 to 4 minute briefing with a few weather maps, narrated by one of the NWS Lincoln forecasters.

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Navigating the Lincoln NWS Page for Severe Weather Info

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Storm Prediction Center outlooks:

The SPC issues guidance on expected severe weather areas across the country, broken up into several categories (slight risk, moderate risk, high risk). The outlooks are broken up as follows:

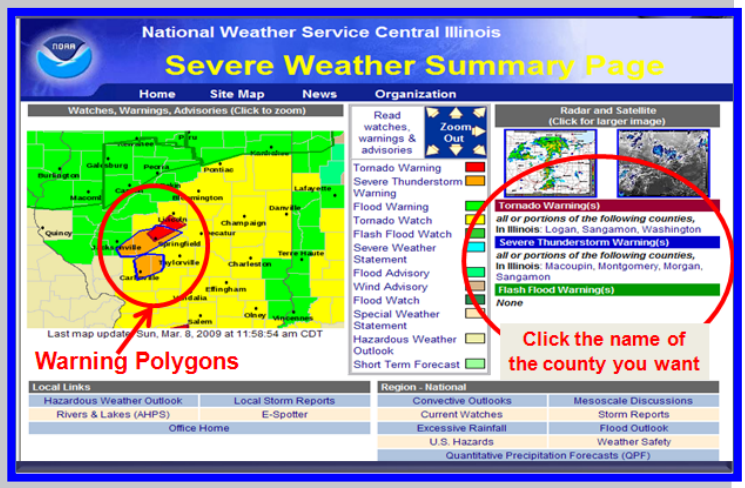
- *Day 1: From 7 am CDT the current day, through 7 am tomorrow. This is updated at 1 am, 8 am, 11:30 am, 3 pm, and 8 pm CDT.*
- *Day 2: From 7 am tomorrow to 7 am the following day. This is issued at 1 am and 12:30 pm CDT.*
- *Day 3: 7 am to 7 am for the period 3 to 4 days from today. This is issued once daily, at 4 am CDT.*
- *Days 4 through 8: This is a more generalized outlook for the remainder of the upcoming 8-day period. An area delineated on this outlook means there is at least a 30% chance of severe weather. This is issued daily around 4 am.*

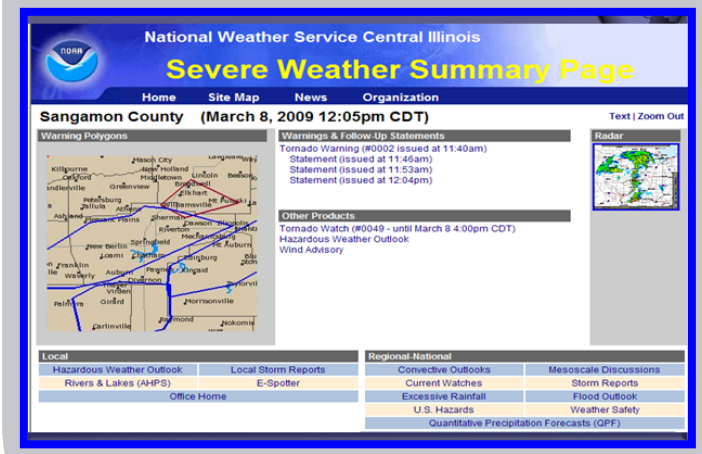
SPC's website is at www.spc.noaa.gov

If you need more detailed information prior to a hazardous weather event, the next place to check is the "Outlooks" section of our web page found in the upper left menu.

Two main sections to pay attention to are the latest local Hazardous Weather Outlook and the Storm Prediction Center (SPC) Outlooks for severe thunderstorms the next three days.

During a hazardous weather event, the best place to get up to the minute information is our "Watches/Warnings" page. The link for this is just below the "Outlooks" link on the upper left menu of our web page. The "Watches/Warnings" page will display the Severe Weather Summary Page, with a color coded map, and warning polygons for Severe Thunderstorm and Tornado Warnings.





To zoom in on the map, and get more detailed information about an area of concern, click on the Warning Polygons or click on the name of the county listed on the right side. This will open a **Severe Weather Summary Page** for the specific county, with locations of the warning polygons (areas impacted by the storm of interest) and links to additional text products and radar displays. Using the easy to find, hazardous weather information on our web page will keep you informed prior to and during events so you can stay safe this spring and summer.

Central Illinois Lincoln Logs

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www.weather.gov/lincoln

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50th Anniversary of Weather Satellites

Fifty years ago, on April 1, 1960, the world's first weather satellite lifted off from Cape Canaveral, Fla., and opened a new and exciting dimension in weather forecasting. Top leaders from NOAA and NASA hailed the milestone as an example of their agencies' strong partnership and commitment to flying the best satellites today and beyond.

The first image from the satellite, known as TIROS-1 (Television Infrared Observation Satellite), was a fuzzy picture of thick bands and clusters of clouds over the United States. An image captured a few days later revealed a typhoon about a 1,000 miles east of Australia. TIROS-1, a polar-orbiting satellite, weighed 270 pounds and carried two cameras and two video recorders. Though the satellite only lasted 78 days, its impact is still visible today.

"This satellite forever changed weather forecasting," said Jane Lubchenco, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "Since TIROS-1, meteorologists have far greater information about severe weather and can issue more accurate forecasts and warnings that save lives and protect property."

First satellite image taken by TIROS-1 on April 1, 1960. Image courtesy of NASA.

"TIROS-1 started the satellite observations and interagency collaborations that produced vast improvements in weather forecasts," said NASA Administrator Charles F. Bolden, Jr. "It also laid the foundation for our current global view of Earth that underlies all of climate research and the field of Earth system science."

Throughout the 1960s, each TIROS spacecraft carried increasingly advanced instruments and technology. By 1965, meteorologists combined 450 TIROS images into the first global view of the world's weather.

In 1975, the first Geostationary Operational Environmental Satellite (GOES) was launched 22,300 miles into space. Its ability to orbit in sync with the Earth's rotation, combined with the polar-orbiting satellites enhanced NOAA's forecasting.

"We could not provide skillful hurricane forecasts without the crucial imagery and data from geostationary and polar-orbiting satellites," said Chris Landsea, Ph.D., science operations officer at NOAA's National Hurricane Center in Miami. "Before satellites, tropical storms and hurricanes were often missed if they stayed out over the open ocean."

When the more advanced TIROS-N satellite series were launched between 1978 and 1981, the name of the spacecraft changed to Polar-orbiting Operational Environmental Satellites, or POES. The POES orbit the Earth at an altitude of about 500 miles and circle the poles once every 102 minutes.

With continued improvements of the instruments and technology, the satellites began giving scientists the ability to track changes in climate – from the subtle onset of drought and its impacts on vegetation, to monitoring global sea-surface temperatures that signal atmospheric phenomena, such as El Niño and La Niña.

"Securing critical climate data records from the advanced sensors flying on NOAA satellites helps us understand the Earth's changing climate," said Tom Karl, who heads the emerging NOAA Climate Service. "For 50 years, NOAA satellites have advanced our ability to monitor the Earth's climate and will continue to provide critical data in the years to come."

The last of the TIROS satellites (now known as POES), launched from Vandenberg Air Force Base, Calif., on Feb. 6, 2009. This satellite (NOAA-19) and its compliment, a European satellite called Metop-A, provide a complete picture of the globe every six hours.